



Interim Goals and Interim Targets

**Task Force Meeting
February 18, 2004**



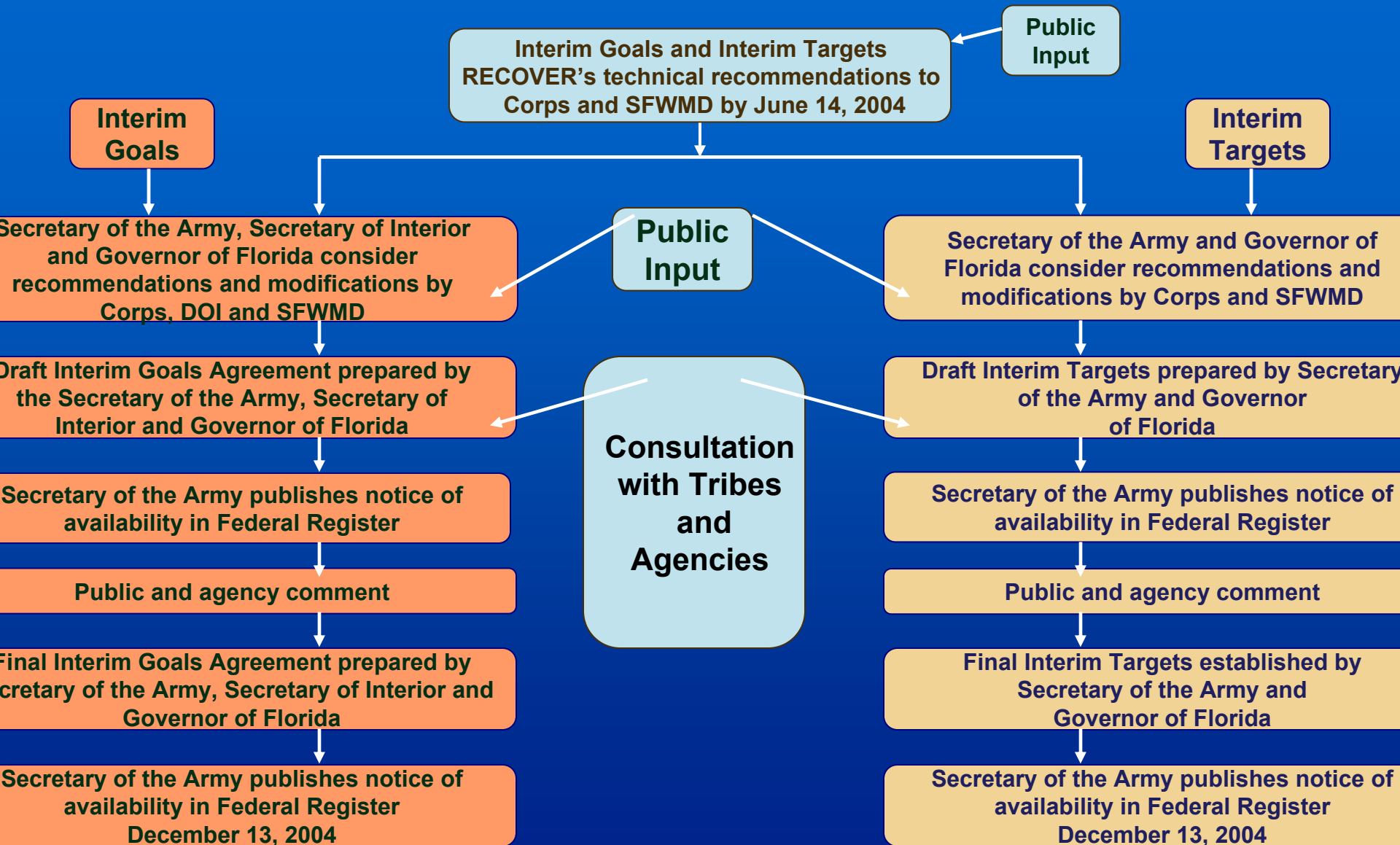
Interim Goals and Interim Targets

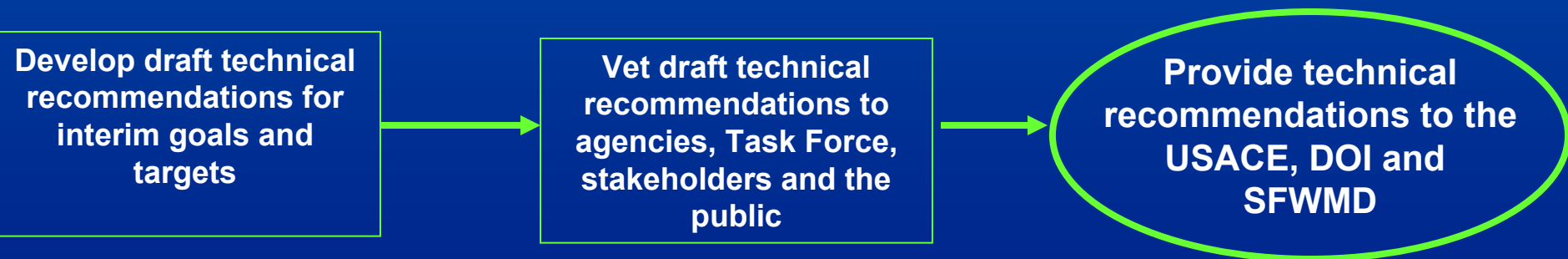
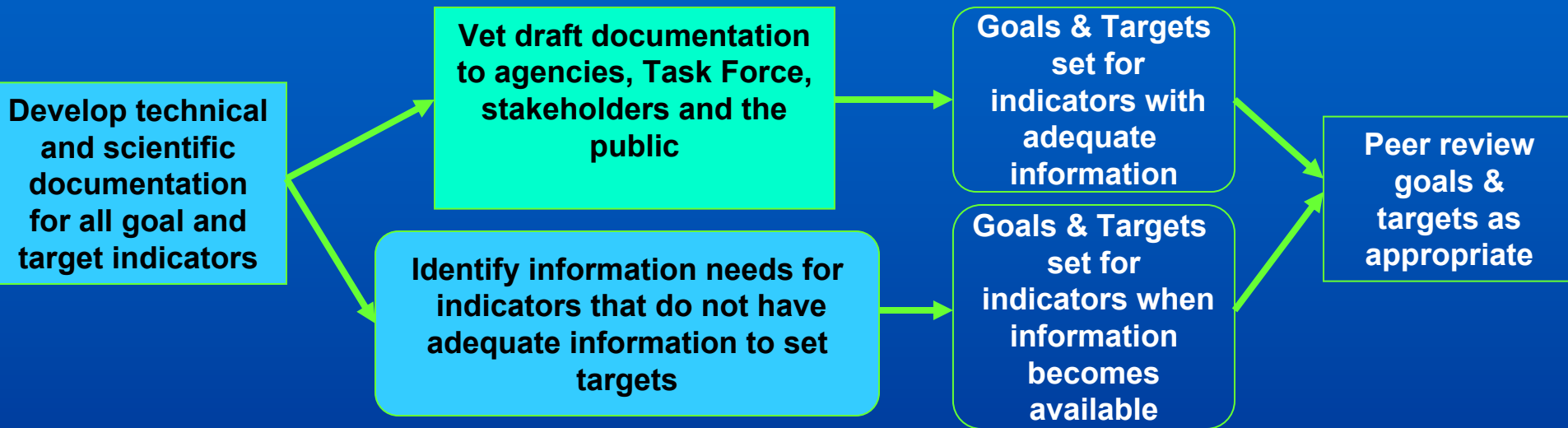
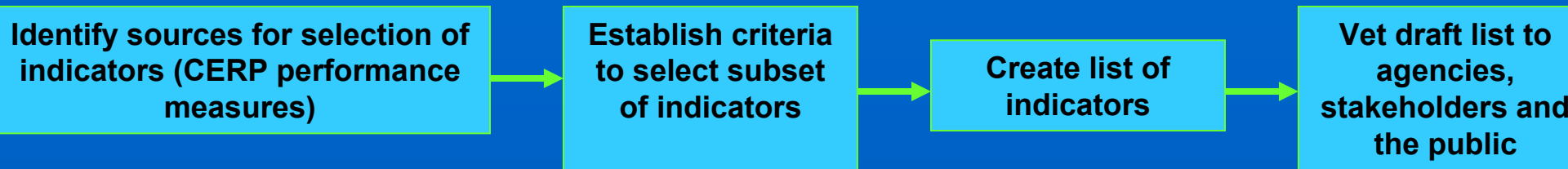
- Interim Goal – a means by which restoration success of CERP may be evaluated throughout the implementation process
- Interim Target - a means by which the success of CERP in providing for other water-related needs of the region, including water supply and flood protection, may be evaluated throughout the implementation process
- Interim goals and interim targets to reflect incremental accomplishment of the expected performance level of CERP
 - Measured at five-year increments beginning in 2005 with goals and targets reflecting results to be achieved by 2010 and for each five-year increment thereafter
- Master Implementation Sequencing Plan to be used as basis for predicting performance

Use of interim Goals and Targets

- Provide a means to track progress at specified intervals
- Each PIR to describe how project contributes to the achievement of interim goals and interim targets
- If interim goals or interim targets are not met, or unlikely to be met, then determine why goals or targets not met or unlikely to be met and either:
 - Initiate adaptive management actions to achieve interim goals or interim targets as soon as practical; or
 - Recommend changes to the interim goals or interim targets

Interim Goals And Interim Targets Approval Process





Criteria for Selecting a Subset of CERP Assessment Performance Measures to be Used as Indicators for Interim Goals and Interim Targets:

- 1) Programmatic Regulations guidelines**
- 2) RECOVER guidelines**

Programmatic Regulations: “...RECOVER shall consider [interim goal] indicators including, but not limited to:”

Hydrologic --

- The amount of water...available to the natural system**
- Hydroperiod targets... throughout the Everglades**
- Seasonal and annual overland flow volumes**
- Frequency of extremely high and low water levels in Lake Okeechobee**
- Salinity envelopes for the St. Lucie and Caloosahatchee estuaries, and Biscayne and Florida bays**

Programmatic Regulations: “...RECOVER shall consider [interim goal] indicators including, but not limited to:”

Improvements in water quality –

- Total phosphorus in the Everglades and Lake Okeechobee phosphorus

Ecological responses --

- Increases in total spatial extent of restored wetlands
- Improvements in habitat quality
- Improvements in native plant and animal abundance

Programmatic Regulations: “...RECOVER shall consider the following [interim target] indicators, but not limited to:”

- **The frequency of water restrictions in the Lower East Coast Service Area**
- **The frequency of water restrictions in the Lake Okeechobee Service Area**
- **The frequency of meeting salt-water intrusion protection criteria for the Lower East Coast Service Area**
- **The frequency of water shortage restrictions... under the Seminole Tribe Water Rights Compact**

RECOVER Criteria for Selecting Indicators for Interim Goals and Interim Targets

- **Consistent with goals and purposes of CERP**
- **Address the physical (quality, quantity, timing, distribution of water), and biological aspects of the Plan: must be measurable hydrologic and ecological indicators that include short-term, intermediate, and long-term responders**
- **Consistent with the approved performance measures used to develop the CERP Monitoring and Assessment Plan**
- **Predictable and easily interpreted: must have a reasonable level of predictability and should be easily interpreted by a broad audience**

RECOVER'S Proposed Interim Goal Indicators: 3 Groupings

Group 1: Indicators that will be developed into Interim Goals using currently available predictive methods (G 1.1 – 1.7)

Group 2: Indicators that will be developed into Interim Goals, although the proposed predictive tools are still under development and/or review (G 2.1 – 2.9)

Group 3: Indicators that, at present, cannot be developed into interim goals, although progress will be reported to Congress at five-year intervals, and for which predictive methods may be developed (G 3.1 – 3.7)

Proposed Interim Goals

HYDROLOGIC --

The amount of water...available to the natural system

G1.1 Volume – Quantity and Distribution

Hydroperiod targets... throughout the Everglades

G1.3 Hydropattern

Seasonal and annual overland flow volumes

G1.2 Sheetflow

Frequency of extremely high and low water levels in Lake Okeechobee

G1.5 Water Levels in Lake Okeechobee

Salinity envelopes for the St. Lucie and Caloosahatchee estuaries, and Biscayne and Florida bays

G1.4 Salinity Patterns in Southern Estuaries

Proposed Interim Goals

IMPROVEMENTS IN WATER QUALITY –

Total phosphorus in the Everglades and Lake Okeechobee phosphorus

G1.6 Lake O Phosphorus

G2.1 Greater Everglades Wetlands Total Phosphorus

ECOLOGICAL RESPONSES –

Increases in total spatial extent of restored wetlands

G2.4 Ridge and Slough Pattern

G2.5 Everglades Tree Islands

G2.6 Spatial Extent of Cattail Habitat

Proposed Interim Goals

ECOLOGICAL RESPONSES --

Improvements in habitat quality

G1.7 Lake Okeechobee Algal Blooms

G2.2 Periphyton Mat Cover, Structure and Composition

G3.7 Florida Bay Algal Blooms

Improvements in native plant and animal abundance

G2.3 Recovery of T&E Species – Snail Kite

G2.7 SAV in Southern Estuaries

G2.8 Juvenile Shrimp Densities in Florida & Biscayne bays

G2.9 SAV in Northern Estuaries

G3.1 Aquatic Fauna Regional Populations

G3.2 Systemwide Wading Bird Nesting Patterns

G3.3 Recovery of T&E Species – Crocodile

G3.4 Systemwide American Alligator Distribution & Abundance

G3.5 Lake Okeechobee SAV

G3.6 American Oysters

Proposed Interim Targets

The frequency of water restrictions in the Lower East Coast Service Area

T1.2 Water Supply for the LEC

The frequency of water restrictions in the Lake Okeechobee Service Area

T1.3 Water Supply for LOSA

The frequency of meeting salt-water intrusion protection criteria for the Lower East Coast Service Area

T1.4 Protect the Biscayne Aquifer from Saltwater Intrusion

T1.5 Protect the Southern Portion of the Biscayne Aquifer from Saltwater Intrusion

The frequency of water shortage restrictions... under the Seminole Tribe Water Rights Compact

T1.2 Water Supply for the LEC

T1.3 Water Supply for LOSA

Proposed Interim Targets

System-wide water supply

T1.1 Water Volume – Quantity and Distribution

Flood control

**T1.6 Flood Control: Root Zone Groundwater Levels
in the South Dade Agricultural Area east of L- 31N**

**T1.7 Flood Control: Groundwater Stages for Miami-
Dade, Broward, Palm Beach and Seminole Tribe
Surface Water Management Basins**

**T1.8 Flood Control: Flood Water Removal Rate for
the Everglades Agricultural Area**

Draft Report on RECOVER Recommendations

DRAFT FOR REVIEW JANUARY 30, 2004

Recommendations for Interim Goals and Interim
Targets for the
Comprehensive Everglades Restoration Plan

Indicators and Prediction Methods



Prepared by
Restoration Coordination and Verification
(RECOVER)

- Introduction
 - Authority
 - Process
- Section 1 – Interim Goals
- Section 2 – Interim Targets
- Draft document posted for public review until February 20

January

RECOVER Team prepares draft documentation of proposed indicators for agency, Task Force, stakeholder and public review

Master Implementation Sequencing Plan Phase 1 complete

~ February

SFWMM model simulations at 5-year increments begin

~ March

Peer review panel for indicators and prediction methodologies

~ April

Goals and targets developed for indicators with adequate information; technical recommendations prepared

June

RECOVER's technical recommendations provided to the USACE, DOI and SFWMD



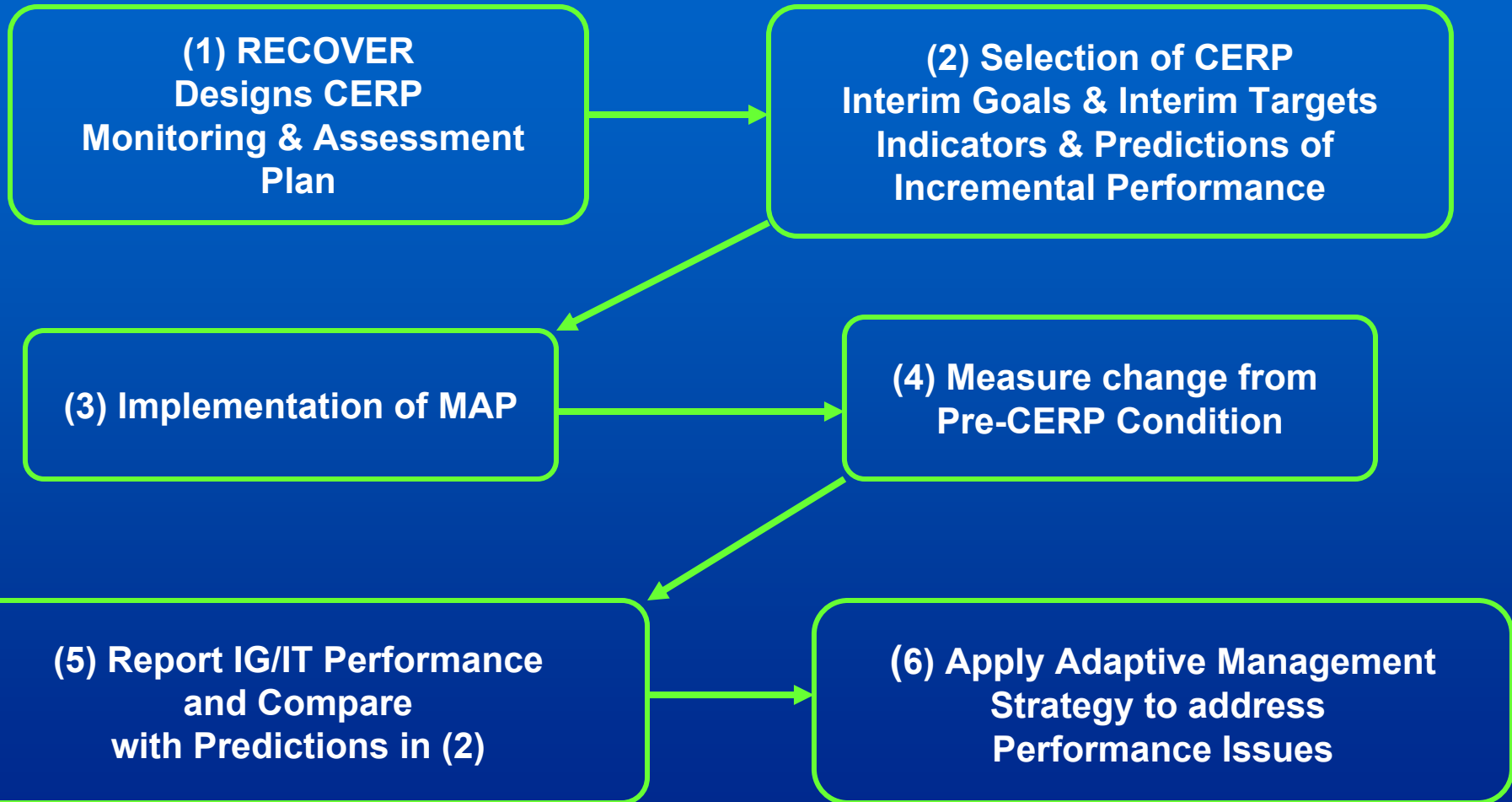
Key Questions for Independent Peer Review of Interim Goals

- Is this the right set of indicators, i.e. do these indicators adequately represent the objectives and the spatial and temporal scope of the Plan?
- Are the models and other procedures that are proposed for predicting the performance of each indicator appropriate?
- Is it reasonable to expect that predictions of performance can be calculated (i.e., are levels of uncertainty manageable?) for all indicators in group 1 and group 2, and that the tools for making predictions of indicators for indicators in group 3 can be developed in a reasonable time?
- For those indicators that can not be predicted at this time, would it be appropriate – at least initially – for the technical teams to produce estimates of desired milestones or expectations at five year intervals, rather than actual predictions of performance?

RECOVER's Final Technical Recommendations (June 2004)

- Will include responses to public and agency review
- Will include responses to peer review
- Will include predictions of indicator responses at 5-year intervals

The MAP-Interim Goals & Interim Targets Process in CERP





Thank you
Questions?